

ABSTRACT

Laminar flow of a carrier liquid and polymeric molecules through micro-channels is used to straighten, align, separate, and/or sort the polymeric molecules. The polymeric molecules may be analyzed and/or manipulated in the carrier liquid or attached to a wall of the micro-channel for subsequent treatment and analysis. Micro-channels can be manufactured using an elastic molding material. One micro-channel embodiment provides fluid flow using a standard laboratory centrifuge.